RHYTHMIC ALTERATION—IF ANY—
IN BACH’S ORGAN MUSIC

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AGO National Convention in San Francisco. The material was ex-
tensively revised for presentation at the University of Nebraska-
Lincoln Organ Conference of 1985. At the suggestion of Robert
Clark of Arizona State University, it is offered here, slightly revised
and considerably cut, but without any attempt to alter the style,
which is that of a lecture. It provides few, if any, answers, but is
designed to present the issues, suggest the evidence and demon-
strate types of arguments touching certain rhythmic problems in
Bach.

INTRODUCTION
In the Marciana Library in Venice there is a little anonymous
manuscript called “Everything You Need to Know to Play the Re-
corder.” It is dated 1630, and its approach to performance could
serve as a theme for these talks. After explaining that the most diffi-
cult thing about learning to play a dance piece is getting the anden-
mento, or ario, right—“the way the music goes,” it says that the
best way to succeed is to listen to a master. As a help, however,
musicians use beats of the hand to maintain the tempo and tally on
the notes to show which ones are to be held longer and which
shorter. The music comes first, the beat and tails are aids to keep it
on track.

Notation is not music. It is no more than a reminder of the gross
shape of a piece of music. Set a Gerwshwin tune in front of a pop
pianist and he will play it as he has it in his head, not according
to the letter of the printed score, even though he may have to use that
score to remind him of places that have slipped his memory. In an article I wrote for The Diapason a few years ago there is an anecdote
about Chopin and Meyerbeer. It was related by one of Chopin’s pu-
pils, Wilhelm von Lenz. He was having a lesson with Chopin on the
Mozart in C Op. 33, No. 5, when Meyerbeer walked in. The piece is, of course, written in 3/4 time.

“It’s in two-four,” said Meyerbeer. I had to repeat it (says
Lenz) while Chopin, pencil in hand, beat time on the piano; his
expression became inflamed. “Two-four,” repeated Meyerbeer
calmy. If I have ever seen Chopin lose his temper, it was at that
instant. “It’s in three-four,” he said, with a look which
practically means “Shut up.” “Give me that for a ballet in my opera,” said Meyerbeer (he was working on L’Africaine), “and I’ll prove you the contrary.”

It is in three-four,” said Chopin, almost yelling— he who never
raised his voice above a murmur. He pushed me out of the chair
and sat down himself at the piano. Three times he played the
piece, counting in a loud voice and beating with his foot: he was
beside himself! Meyerbeer stuck to his guns and they parted an-
gry. Without saying goodbye to me, Chopin disappeared into
his study. And yet it was he who was right.

Even if the first beat was twice as long as the other two, he was
simply playing the kind of three-four time one plays in a mazurka.
The truth is the article goes on) that musical notation in a familiar
idiom is far more than just the notes on the staff. It is the look of the
page, the title, the composer’s name. All these lock in with one
another, evoking a whole complex of associations. They form a
kind of Gestalt: something with more meaning than the simple sum
of the meanings of each component. The quarter note at the begin-
nning of the measure is not just any quarter note on any first beat, it
is the first quarter of a mazurka. So we play it the way quarter notes
on pages with “mazurka” at the top are written: long. Quarter notes
on pages with “My Country ‘ts of Thee” written at the top are of a
different value and character. A Viennese orchestra player pales in their
own kind of 3/4 time—with the second beat advanced. They are not “altering” the rhythm; that is the way waltzes go.

There is enough evidence to satisfy me—that not Frederick
Neumann—that Baroque musicians sharpened the dotting of
French overtures and synchronized the short notes of dotted figures
of different values occurring together. How could an orchestra possi-
bly do this, says Neumann, unless it was written out in the parts
or specially rehearsed. But of course it was written out in the parts:
at the top of each part, it said, “...allegro.” I’ll go out on a limb and
say that at any one time and place there was probably a tendency for
a degree of dotting that was stylish in overtures, and that this was the
way they were played, whatever the notation. Doubtless some com-
posers tried harder than others to make their notation correspond to
the prevailing style; it is likely that their overtures should be played
more or less as written.

What has plagued the authenticity movement ever since it began
is the vain attempt to discover a code—a kind of constant factor by
which old notation might be multiplied to produce old perfor-
mance. The assumption has been that composers meant something
quite definite by their notation, that it was not what a modern com-
poser would mean by the same notation, and that patient research
could discover a Rosetta stone that would enable us to translate
from their language to ours. Any uncertainties would be filled in
with “good taste,” which, for lack of any more definite information,
was assumed to be the taste of the researcher.

There was a time when notation was very exact, at least as re-
gards rhythm. If the singers reading off the individual part books of
Renaissance polyphony did not carefully observe the complicated
written values, the consonances and dissonances would come out
wrong, to say nothing of the risk that everybody might not end up
together. But in the Baroque period, the chordal or harmonic under-
pinning provided a series of easily perceived malting points that
gave everyone much more flexibility and permitted a good deal of
liberty in between. Thus composers were no longer compelled to write
precisely what they expected to hear, which was just as well, be-
cause the new requirement that music should be expressive and
meaningful, not just beautiful and correct, demanded a large
amount of creative input from performers.

The art of composing notes in expressive raiment was taught over-
whelmingly by example and in lessons, but occasionally a virtuoso
or theorist would try to write down as much of his performing art as
he could find words to describe. It is these treaties that furnish the
data upon which students of early performance have tried to manu-
facture keys to Baroque notation. Where treatises are lacking, the
notation itself has been minutely searched for clues to its probable
interpretation. There are certain areas of 17th- and 18th-century
music that are so well illuminated that an able performer with the
right equipment can be quite sure of being able to produce interpre-
tations that would sound—if not ideal, then at least within a fami-
ilar range of possibilities to the composer himself. This is as much
authenticity as we can hope for. Some of these areas are French
keyboard music, the air de cour, music for the viola, and practically
every instrumental music of the 1750s, a decade which saw the great-
est concentration of important performance treatises of the whole
period. But there are other areas where practically nothing is known,
like Italian opera of the period of Cavalli and Cesti, and . . .
Bach.

The things we do know about Bach only make it more difficult to
say how he might have played the organ. His style of composing
goldenly over the years, and sometimes from piece to piece.
He was aware of and sensitive to a wide variety of music including
French and Italian, but we do not know how much he knew about
the performing conventions that went with it, much less whether he
tried to reflect these conventions when playing Bach’s own con-
ntructions of his own as were influenced by the different styles. We know
least of all about what must have been the point of departure for all
his playing: the performing style of his family and those whom we
know he admired—Buxtehude, Reincken, Böhm, etc. The one
really concrete bit of information concerns his hand position and fin-
gern motion—but at the clavichord, not the organ.

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All we have are the notes of his compositions, and the knowledge that these notes are not the music. On the organ, we have to guess at registration, tempo and any variations of it, articulation, ornamentation and agogic nuance. The rapidity with which opinions change on these matters, the acrimony of scholarly debate, and the sheer volume of commentary are themselves evidence of how little is really known: if we had any clear evidence, it would be impossible to disagree at such length. These are all features that are unwritten in the score; they are what Bach's pupils learned by listening to the words or the playing of the master, and what other organists did because they knew roughly how this kind of music was meant to go.

But there is another kind of problem: how to treat the things that are written in the score. Do they mean what they say? There is one common rhythmic figure, for example, that cannot mean what it says: \( \frac{2}{3} \) sperling's Principia musicæ, published when Bach was 20, is but one of many sources that tell us that it means \( \frac{2}{3} \) and that the reason for the former notation is "perhaps" to save time in writing. This "perhaps" is illuminating: here is a contemporar- y of Bach geniuses at something as simple as this—no, not to be sure, at the meaning of a characteristic notation, but at the reason for it. Sometimes Bach wrote the more cumbersome form—In the Musical Offering and The Art of Fugue, for instance, where he had reason to be especially precise—at others he was lazy, as in the manuscript cred in the Clavierubung, which we shall be looking at later. Thus we have to ask, when Bach can somewhat be believed and sometimes not—unless of course neither represents the intended rhythmic effect. There are other rhythms in Bach's organ scores that can be played, but they are difficult in a way that seems not to be characteristic of Bach's difficulties, they introduce inconsistencies in the treatment of similar themes or figures, and they conflict with other of the period telling inadmissi- ble or impossible. These problems all involve clashes between triple and double divisions of the beat, and they constitute much the largest category of possible departures from the written rhythms.

The two remaining kinds of rhythm that may not mean what they say are running eighths and sixteenth and dotted figures. Our suspect- ises are based on isolated remarks in performance treatises and analogies with French music, but they are impossible to confirm or deny with any degree of certainty.

I used the term "rhythmic alteration" in the titles of these lec- tures, but I wish I hadn't. It is wrongheaded and responsible for much of the confusion that surrounds attempts to deal with Baroque rhythm. It proceeds from the tacit assumption that the thing that is altered, namely the score, is the essential artifact, and not sound in the air. The trouble is that scores are all we have left of Bach's organ music. We have to use them, and we can only try to discover what the music they sketch must have sounded like. But this attempt will be frustrated if we allow ourselves to imagine that the gulf dividing score from sounding music is of a constant width, that one set of solutions can serve for every piece.

I am coming more and more to believe that we must relinquish that crutch, that handhold most cherished of all by music editors and performers: consistency. I mean specifically: consistent treat- ment of similar material, in the same piece or from one piece to another. "If the theme is dotted in bars 27 and 28, then we ought to do it in bars 1 and 2." (Ex. 1)

**Ex. 1. Bach: Prelude in B Minor, BWV 544**

In saying this, I am aware of treading on very soft ground. Australia is the country that has recently spawned a new approach to editing and performance that enshrines the opposite of consistency, namely inconsistency, as a principle. Two writers, to my knowledge, have been attacking traditional editors, practices, and in an approach that lies somewhere between absolute fidelity to the vagaries of early scores and the modern habit of ironing everything out by making all appearances of similar material conform to the same rhythmic or ornamental shape. In the case of Bach, this Australian "Revolution in the Science and Practice of Music," as it was called in one of one articles, has been crushed by the iron-fisted of Georg von Dadosken. For myself, I am highly skepti- cal of anything resembling a principle when applied to music, whether it is consistency or inconsistency. But I shall try to show that Bach was sometimes inconsistent in both notation and perfor-
mance, and that this inconsistency occurred in prominent places within the same piece—indeed within the same phrase. Further- more, he genuinely changed his mind about rhythm from one ver- sion of a piece to another. This does not mean that every manu- script is to be accepted in all its details as the music itself. That would be contrary to what I have just been saying about the relation of notation to sounding music in the Baroque period. What it does mean is that the test of the correctness of our interpretation of Bach's scores cannot always be uniformity in the presentation of the materials of a piece. Thus we are relieved of the requirement of finding a way to make everything conform, to the same time that we are deprived of a familiar and believable task for fooling ourselves in.

In the case of Bach's organ music, we labor under a great disadvan- tage. Though we have no choice but to depend on the scores for our knowledge of the music, the vast majority of these scores are secondhand—written not by Bach himself but by sometimes un- known copyists at unknown removes from the composer. Even the best editions, including the Real Bachs Organ, are no substitutes for its separate volumes of critical notes. We do not give all the variants of all the pieces; since not all the editors are interested in the questions that concern us here, they pass over evidence or arguments that could free us from the tedious business of acquiring films of all the sources and comparing them. Even if we had films, we might not be able to distinguish between different layers of corrections. But so far as I can ascertain from my limited studies of variants and from what others say about them, it was not normal in Bach's circle to change rhythms when one was copying out someone else's music. (This is far from being the case in other repertories, by the way, and I am thinking here especially of French and English instrumental music of the 17th century.) In fact, the most interesting rhythmic variants in French music are to be found not in copes- but between his own autograph versions of the same piece.

The question before us is this: when did Bach's organ scores mean what they say, and when do they not? How is the music supposed to go? These lectures will be organized in three main parts, each devoted to a rhythmic convention whose application to Bach is vig- orously contested: inequality (fig. 1), dotting, overdotting, and the assimilation of duple to triple divisions of the beat, or vice versa. As far as possible, problematic passages in the organ works will be discussed where they best fit.

**INEQUALITY**

"Inequality" is the practice of rendering certain subdivisions of the beat as a succession of unequal pairs: usually long-short, but sometimes short-long. In France, this inequality was extremely common and usually written. In other countries it was less common and usually written. In France, it was considered to be an as- pect of the art of performance, and it was elaborated into various very detailed sets of rules. From about 1680 to 1790, most French performance manuals or treatises dealt with it. In other countries, it was less common and was never, with some exceptions, presented in performance as a normal way to perform any subdivisions of the beat. If composers wanted it, they generally wrote it out with dotted figures.

In France, it was, above all, eighth notes that were unequal. The most common of the rules and exercises were for learning to pass les croches—deliver the eights. In fact, passer was sometimes used as a synonym for "to render with unequal pairs." By the second quarter of the 18th century, the theory of inequality had become very elaborate in some treatises. Inequality was related to meter and the beat, and values other than the eighth were also designated as unequal. In duple meters, notes of a quarter of the beat or less were unequal, and in triple meters, one half or less. A terminology, a notation, and various kinds of qualifications and nuances devel- oped, and one treatise of the middle of the century called inequality the principal means of expression and the principal difficulty of musical performance.

But in the late 17th and early 18th centuries, the period of Bach's musical formation, there were not so many rules. For one thing, there was a wide range of practices existed and was even demanded, the theories of meter and the beat were themselves still not quite stabilized after the long transition away from Renaissance proportions geared to an unvarying tactus. For another, there was less variety of rhythmic styles to account for in the theory; the influence of Couperin was just beginning, and the rhythmic fustiness of the gallant style had not yet developed even in Italy.

I said that in France, inequality was normally the contribution of performance, the score showing only plain notes. The first really detailed description of it, in which inequality of sixteens and quarters was specified in appropriate measures as well as inequality of
The practice of inequality as a general, rather than national, approach to the delivery of appropriate passage work, then Quantz could easily have acquired the habit. This would account for the fact that he attached no national label to it. It is true that he cited as his principal musical influence Volumen’s successor, the cosmopolitan violinist Piesendel, who had studied with Vivaldi as well as visited France. But Piesendel had played under Volumen even longer than Quantz. Piesendel, by the way, was also known to Bach.

All this, to be sure, is speculation, but if indeed this is the explanation for the extraordinary and striking recommendations for inequality in Quantz’s book, then J.S. Bach must have heard a great deal of it during his visits to Dresden. Of course, he may have hated it—but if so, why did he insist on disfiguring his noble polyphony this way?

There is one early piece currently accepted as being by Bach that could be direct evidence of his awareness of the inequality convention.

If Dieupart was Bach’s model, then Bach must have perceived the overture as dotted.

Hans Knotz discovered what may be only an amusing coincidence in the “St. Anne” prelude:

I should observe here that the French overture was thoroughly naturalized on German soil by this time, having been introduced not later than 1685 and developed by at least nine composers up to the year 1716, when Telemann alone claimed to have already composed 200 of them. To what extent French performing conventions accompanied and stayed with the overture in Germany is a matter of dispute—as indeed are the French conventions themselves. Mattheson wrote of the “impetuous, dotted nature, the sharpened rhythms” of French instrumental music. . . . “If the French, which I hold to be great masters of instrumental style, were to give try dots after their notes, they would be like cooks without salt.”12 Dots and ornaments were probably the features of French music that dominated the superficial impression of foreigners. Bach was reported to have felt that Couperin’s music, though in many ways admirable, was disfigured by the quantity of ornaments. Perhaps he found inequality a disfigurement too, but I think it gives life and grace to the Aria in F, BWV 587. There is no evidence, by the way, that Bach was the arranger, though he could have been. It is a movement from the introductory sonata to Couperin’s suite for instrumental ensemble entitled L’impiale, published in 1726 as part of the set, Les nations. Griepenkerl, who edited the Peters edition of Bach’s organ works in 1844, took this arrangement from a manuscript in his possession but was lost containing other pieces that were attributed to Bach but showing no attribution for this one.

It is not only in pieces in overture style that Bach imitates inequality with written dotted. Here is a piece that seems intended to suggest a French sarabande for two violins and continuo. The text...
ture of parallel thirds above a bass is typical of French chamber music, but not at all characteristic of German or Italian music of Bach’s day. And the dotting confirms the resemblance.

Ex. 5. Bach: Partita V, BWV 829, Sarabande

It is much harder to find pieces that are not dotted that seem to resemble French models. I know of only one organ work. It was brought to my attention in the paper by Marie-Claire Alain, mentioned above, in which she pointed out the resemblance to five-part textures typical of de Grigny’s organ music—which of course Bach knew completely. Not only the five-part textures, but the ornaments and, as Peter Williams has noted, close imitation are more French than Bach-like. Is it possible that the eightths were meant to be played unequally? My suspicion, based on no evidence, is that Bach did not conceive the music that way, nor would he have expected it to be played dotted, but he would have been aware of the possibility of emphasizing the French qualities by dotting if anyone had wanted that effect.

Reversed, or short-long inequality was a minor component of the French convention, as we have seen in the example by Gigault, and as we know from various theoretical references. The normal form for it today is Lombard rhythm, and this reflects its much stronger association with Italian music. There are Spanish, Italian and French references to short-long alternation of evenly written values going back to the 16th century, but the Italian rage for it in the second quarter of the 18th century was variously credited to one of Vivaldi’s operas or the style of Tartini and his contemporaries. However, as Verrieres wrote—that is, even if the Italians played or sang at this time were written; they were notorious for their extravagant improvised passage work. In two articles in the Bach-Jahrbuch, Gerhard Herz has satisfied me that the accompaniment parts of the “Domino Deus” from Bach’s Mass in B Minor were meant to be reverse-dotted throughout, though the written rhythm is found only in a couple of passages in the orchestral parts. The parts were sent to Dresden in 1723 and included a flute obbligato that Bach must have supposed would be played byBuffardin or conceivably Quantz (though Quantz complains of the Lombard style in his book). Frederick Neumann has advanced the ingenious but far-fetched hypothesis that the reversed-dotted incipits were a signal toBuffardin not to play normal short-short French notes inégales. But either way, Bach would have had some expectation of unequal performance of equally written values in Dresden.

The second of the two basic questions we asked about inequality was: Was there any German equivalent? I have suggested that it could conceivably have existed in Dresden as a local custom. But was there anything resembling inequality rooted in German thinking and tradition? There are those who have claimed that there was, and not only on Quantz’s say-so. The most compelling evidence is found in a treatise very close to Bach: Walther’s Præcepta der musikalischen Composition. This is dated 1708, at the beginning of Bach’s and Walther’s friendship in Weimar. It is based on German theory of the second half of the 17th century, a kind of thinking with which Bach must have been brought up. The passage that concerns us is on pages 22-23 of the modern edition. The subject is an ancient one in the theory of rhythm: the distinction between strong and weak beats, and strong and weak subdivisions of beats. In Italian and German 17th-century theory, the terms “good” and “bad” were commonly used, and all notes were definable as rhythmically “good” or “bad” in the relation to their neighbors.

But this doctrine was mixed with the notion of quantity in classical poetic meters, which was a matter of the length of syllables. In their passion for the display of classical learning, German theorists of the mid-17th century spoke of “quantity” when they meant accent. Walther gives the line “Die Seele ruft und schreiet...” and shows the wrong and right ways to place metrically a musical setting consisting entirely of eighth notes.

Ex. 6

He calls the notes alternately long and short. In order to differentiate this kind of “length” from duration in time, the terms “intrinsinc quantity” and “extrinsic quantity” are used. The former kind is accent, the second length. Thus, according to their intrinsic quantity, notes can alternate long and short, while according to their extrinsic quantity, they are all equal. You can see the potential for confusion with inequality. The operative sentence is this:

Intrinsic quantity of notes is that length where certain notes, which according to their written value are equal, are treated quite unequally, so that one note compared to another like it is now long, now short. In this example (Meine Seelen), the notes are, to be sure, equal to one another according to their external value (because they are all simply eighths) but according to the internal value the first, third, fifth, and seventh are long and the second, fourth, sixth, and eighth are short. And this is because of the hidden power of numbers [f].

The operative word in this explanation is “treated,” tractiert. Does this mean accented or lengthened? If “treated” unequally means made audibly long and short, then we have notes inégales. But suppose it means “accented.” What did organists do? Ignore it? Suf by twos? or play unequally? It is perfectly obvious that in setting words to music, Bach knew how to place accented syllables on the “intrinsically long” notes, and there is every likelihood that he thought of musical prosody in terms of classical poetic meters. But did he try to reflect this perception in his organ playing, and if so, how? All we can say is that it is conceivable that his organ playing was overlaid by a gentle inequality, but anyone knows that it is also possible to play rhythmically with a pretty even delivery of equal notes, especially if the words are detached so that they can be distinguished by larger or smaller spaces between them. In fact, this could also be the practical meaning of long and short.

There is one further observation that it is possible to make about inequality in Bach’s Germany: except conceivably in Dresden, Celle and any other French-directed musical establishments, a composer could not expect that the ordinary musician would perform equally written notes as notes inégales in the French manner; this was not a normal part of German training, as in France it clearly was. But Bach did not always write for the normal musician, and a good deal of his music was deliberately arcane in one way or another. He delighted in symbols, puzzles and extraordinary challenges, and he had the soul of a diabolist. It is perfectly possible that hidden away in some piece is the possibility of notes inégales—as I have suggested in the case of the Fantasia in C Minor, BWV 562. If he wanted to be sure, however, he wrote dots.

OVERDOTTING

The next question to be addressed is overdotting. To make any sense, the argument has to be broken down into subtopics.

1. Overdotting as a blanket recommendation for all performance.
2. Overdotting as a consequence of inequality.
3. Overdotting to distinguish written dotting from unwritten inequality.
4. Overdotting of the first strain of French overtures.
5. Overdotting of longer values to bring the complementary short notes into synchronism with those of simultaneous crotchet figures in shorter values.

1. Overdotting as a blanket recommendation for all performance is found in both Quantz and C.P.E. Bach. Quantz is explicit: in whatever tempo, dotted eighths are to be triple-dotted and dotted sixteenths, double-dotted. C.P.E. Bach is less explicit, advocating blanket overdotting in one place, then admitting qualifications of the rule in another. The clearest statement on the subject is in Johann Friedrich Agricola’s annotations to his translation of Josi’s Opinion—a treatise on singing written in 1723. Agricola was a pupil of Bach between 1738 and 1741, then of Quantz. He knew C.P.E. Bach. He had a strong interest in Italian opera and was a partisan of Italian taste over the French. This page of illustrations of dotting is from his book, published in 1787.

Ex. 7

JUNE 1987

The American Organist 21.6, June 1987

43
His main rule reads: "Short notes after a dot, especially sixteenths and thirty-seconds but also sixteenths in alla breve time, whether in slow or fast tempo, whether one or many, are always very short, and are to be performed at the extreme end of their value. Notes before the dot are correspondingly longer." Reversed dotting is treated in the same way, in disagreement with C.P.E. Bach.

2. There is no similarly explicit rule to be found in French treatises, though there are a few references to sharp dotting in certain circumstances. Overdotting was, however, a normal consequence of inequality. If sixteenths were unequal, then the dot after a dotted quarter, which of course has the value of an eighth, was lengthened, and the complementary eighth shortened. This had the effect of double-dotting the quarter. But this kind of overdotting only occurred in a context of notes inégales to dotted notes of the value next larger than the one being treated unequally.

3. Some French treatises say that written dotting of values that would normally be unequal anyway, like sixteenths in 2/2 or 3/4 time, indicates a more rapid tempo. In practice, it is very hard to know when written dotting in French music is intended to read this way rather than simply as a cautious or redundant indication of notes inégales.

4. Overdotting in French overtures is the most controversial of all these types. The notation of scores is usually highly inconsistent, and theoretical or literary references are few and usually couched in images whose strict interpretation is arguable. One consideration that is rarely mentioned is that the fire and vigor in performance, which everyone seems to agree is a characteristic of the first strains of overtures, can be as much a matter of articulation, tempo and dynamics, as is it of the strict ratio between long and short notes.

5. Finally, the question of synchronization is rarely addressed in treatises, but there are enough references to prove that it was sometimes desired. One of the clearest stipulations is in the preface to Gigault’s organ pieces.

To summarize the matter as it touches Bach: we have blanket recommendations for overdotting that are all German, close to Bach, but possibly distant in a stylistic sense, perhaps issuing from an Italian or modern Berlin aesthetic. There is also overdotting as a consequence of inequality, if Bach intended unwritten inequality. The same goes for written dotting as distinguished from unwritten inequality. French overtures were probably sharpened in some way, and the question of synchronization in Bach is a matter of the precision of the notation, which is variable.

I will take up the organ pieces in which overdotting is or might be an issue in BWV order. The first, and slliest, is the B-minor Prelude, BWV 544. There is, first of all, the matter of consistency mentioned earlier (Ex. 1). Here the preludial riddle comes up: was Bach forgetful or did he want variety? Since the source is a fair copy and one of the few autographs of his organ music, it has a lot of authority. I rather like the variety. But there are some (or perhaps only one, who shall be nameless) who not only dot, but see the dots and 32nds, and the rather homophonic texture, as a red flag signaling “French overture,” regardless of the fact that no first strain of an French overture was ever in 6/8 time and the form has nothing to do with that genre.

The next piece is the “St. Anne” Prelude, BWV 552. Here we have another impeccable source.

Ex. 9

The engraving of this piece appears (according to NBA) to have been a careful reproduction of Bach’s fair copy, done by oiling the manuscript and laying it face down on the engraving plate and marking through it. This is one of the most precisely notated of Bach’s works from the point of view of dotting and rests. The question that concerns most organists is whether the dotted quarter in bar one and similar bars unusually long. The dot should be double-dotted to enhance the overture effect and make it consistent with places like b. My answer is that Bach shows no laziness elsewhere in the piece about writing the necessary ties and rests to produce a double-dotted effect (as in b). Moreover by engraving the work he was authorizing its circulation beyond the circle where he could have any control of how it was to be played, so would have had a motive for writing what he wished to be heard. A final reason for taking the notation literally is the fact that the same figure of upbeat followed by a long appoggiatura occurs in a third rhythmic guise, as in c. Against this, however, must be placed the blanket overdotting recommendations of his son, of his pupil Agricola and of Quantz. These recommendations could also apply to the running dotting of sixteenths and sixteenths. But there could be another explanation for this persistent dotting: notated inequality. If this is the meaning, then the performer has license to underdot as well as overdot, or even play it literally. I can only give you my personal feelings. I think Bach certainly had stil francese in mind, and perhaps a vague analogy with the overture, but only a very loose one. He wrote plenty of real overtures and knew the difference. But I think he wanted the distinction between a, b and c observed, and though I think he probably thought of the running dotting as written notes inégales, they were to be close to their arithmetic value, though maybe with more lilt than jerk.

BWV 681, the monumental fugue on “Wir glauben all’ an einen Gott,” has dots and little ties like as Bach writes in his French overtures, and it looks like a candidate for Agricola’s overdotting.

Something, I think, needs to be done to the rhythm other than to play it literally, because synchronizing the sixteenths with the second of the three 32nds all the way through gives a ponderous, mechanical effect.

Ex. 10

But there is another approach. Does “Wir glauben,” on paper at least, not bear a remarkable resemblance to the gigue from the first French Suite?

Ex. 11

This is one of Bach’s two gigues in dupel meter. Duple meter gigues have a special history. They were imitated by Germans in the mid-17th century from the duple-meter gigues of French lute music. There is convincing evidence that the French played some of these pieces in two ways, en allemande, that is as written, and slowly; and en gigue, probably faster, and in triple time, with necessary adjustment of the written values. This is explicitly mentioned in a few French sources and there is a reference to the phenomenon as late as 1786 in a manuscript treatise by someone calling himself “Cléret, pupil of Grétry.” Froberger was the one who established the duple gigue in German keyboard music, and one of his exists also in ternary notation in two French manuscripts, further evidence of the connection.

Though the French almost never wrote duple gigues for keyboard, the Germans did in quantity, and especially in the generation preceding Bach’s. There are some by Böhm, for instance. Did the tradition of transforming them into triple meter also persist in Germany? The question has never been studied, to my knowledge. If Bach thought of “Wir glauben” as a gigue, it might sound like this.

Ex. 12
My own feeling is that by Bach's day the tradition of ternary transformation of double gigue was dead and perhaps forgotten—but the archaic ternary mensuration sign on his other double gigue, in the sixth partita, may be evidence of the contrary.

BWV 682, the "Vater unser" from Claviertouren, is the most rhythmically complex of all Bach's organ works, and, like the "Domine Deus" from the Magnificat, it is dominated by the rather rare Lombard rhythm. This together with the pervasive triplets represented for Bach a modern style—whatever else it might have symbolized and in spite of the very Baroque contrapuntal richness—and authorizes us to seek modern solutions to its performance. If there is any organ work to which the overdotting of Agricola might be applied, this ought to be it. Unfortunately C.F.E. Bach disagrees, so as usual we are left to our own devices.

The last pieces to be considered under the overdotting rubric are Nos. 2 and 6 of The Art of Fugue. No. 2, in which, once begun, the dotting is maintained relentlessly without interruption or rhythmic overlay to the end, is the greater puzzle of the two (Ex. 2). It is not marked "in French style." The only precedents I have been able to find are fugues by Pachelbel, Zachow and Fischer. All three could have been known by Bach. These in turn might have had as their models the fugal second strains of certain overtures of which a line can be traced from Lully to Hamburg opera of around 1700 to a keyboard overture by Böhm in one of the Bach manuscripts. None of this tells us, unfortunately, whether Bach wanted the dotting in Contrapunctus 2 to be precisely 3:1, underdotted, overdotted or varied.

Contrapunctus 6 is headed "in French style." The heading, which appears only in the engraving, was probably added at Bach's direction.24 The fugue is copiously dotted at two levels, quarter/ eighth and eighth/sixteenth, and copiously decorated with little three-note tirades like the fuguetta on "Wir glauben all." In fact the texture is not at all unlike that piece. Some of the tirades were added to the autograph manuscript as afterthoughts. What makes this particularly interesting for our purposes is that we have on the one hand a piece proclaiming itself to be in "French Style," with dotting on two levels that in typical French homophony would probably be synchronized so that the short notes come together, and on the other hand a strict fugue with the subject both in normal values and in diminution, in which the precise halving and doubling of values between the two forms of the subject would be destroyed by synchronization.

Ex. 13. Bach: The Art of Fugue, BWV 1080/6

But a second look will tell us that one form of the subject is not the exact diminution of the other: the tail of the diminished version is composed of even sixteenths, while the tail in normal values is dotted. Should those sixteenths be dotted by the player? In order to arrive at an answer based on the musical effect, I went to the trouble of learning this piece. I decided that unequal sixteenths sounded ridiculous, especially toward the end, where there are streams of them.

In considering the possible application of French conventions to this soi-disant French piece, we must bear in mind that no Frenchman would ever have tried to write such a piece, at least not in the 18th century. This kind of a fugue and this kind of a counterpoint is totally un-French. That having been said, we can nevertheless ask ourselves whether there is anything corresponding to French inequality noted in the piece, and the answer is that there is. All the dotted eighths, developing the tail of the subject in normal values, may be understood as written croches inequalities, normal in an overtone. But if these were a French piece, with the eighths written plain and played unequally, inequality would also apply to all the dots on quarter notes, which would then all be played double-dotted. This would result in synchronization, and would destroy the exactness of the diminution as far as it goes. There are some who play it that way. But they do not carry this approach to its logical conclusion, which would be to dot all the sixteenths and synchronize all short notes to 32nds.

My feeling is that if Bach had any kind of performance at all in mind—as opposed to mere playability on a keyboard—which I doubt, he would have wanted his hard-won contrapuntal virtuosity to be heard in all its complexity, and not smothered under rhythmic uniformity. The precision of the notation bears this out.

DUPLE/TRIPLE BEAT DIVISIONS

By far the largest number of rhythmic problems in Bach's organ music arise from conflicts between duplet and triple divisions of the beat. Are these conflicts to be heard? Or are they to be reconciled by one part yielding to the rhythm of the other? There are four types of conflict:

1. Dotted figures against triplets—or sometimes, where each part has its own time signature, dotted figures against metrical groups of three.
2. Even duplets against triplets—what we usually call "two-against-three."
3. Anapestic or dactylic figures against triplets.
4. Duplet-triple conflicts against a third running part in smaller values.

Both C. F. E. Bach and Quantz expressed themselves clearly and unequivocally on the subject of dotted figures against triplets. Bach said that when dotted figures appear in one part against triplets in another, the short note of the dotted figure is played with the last note of the triplet. Quantz said that in the same circumstances, the short note must come after the last note of the triplet—as of course it would anyway if the blanket rule of overdotting was followed. Bach's overdotting rule obviously suffered a tacit exception in the case of simultaneous triplets. Agricola, in a review of Georg Lohlein's Clavier-Schule (1765), said the following:

On page 70 [of the method] it is taught that when dotted notes are located against triplets, the note after the dot is struck with the third note of the triplet. This is true only at the very fastest tempi. Except for this, the note after the dot must be struck not with but after the last note of the triplet. Otherwise the difference between duplet meter, in which such conflicts arise, and 3/8, 6/8, 9/8, or 12/8 would disappear. Thus J.S. Bach taught all his pupils; thus Quantz taught in his Versuch.25

This reasoning and the reference to Bach was confirmed in another article six years later. Note that Agricola is talking about preserving an audible distinction between $\frac{3}{2}$ on $\frac{1}{2}$ and $\frac{9}{8}$ on $\frac{7}{8}$. He does not discuss $\frac{2}{3}$ on $\frac{1}{3}$ which, though rare by midcentury, was not infrequent in Bach's music.

But while Bach may have taught his pupils that way, he did not always practice what he preached, as this example shows.

Ex. 14

We are thus left in our usual situation of having to judge each case on its merits. When dotted figures are introduced occasionally against predominant triplets, a sharply dotted effect would be an intrusion. When both dotted figures and triplets are a principal component of the thematic content or figuration, the question is much harder to decide. The Prelude in C Minor, BWV 546, offers an example of the first situation. During the long passages in triplets, dotted figures are introduced casually, in subordinate voices, and without acquiring any thematic or even motivic identity.

Ex. 15

To play them as Bach taught would be to introduce a new rhythmic effect that could only be intrusive. The case of the Schübler chorale, "Kommt, nun, Jesu, vom Himmel herab," BWV 650, is more arguable. The obbligato figuration that begins the piece, and is the only continuous element, is written in 9/8, whose character according to Bach himself via Agricola was to be differentiated from 3/4 with triplets. But the pedal
part, which could have been written in 9/8, is notated in 3/4, with both dotted quarters and dotted eighths against the sixteens of the left hand. It is really bar 15 that is the giveaway in my opinion.

Ex. 16

Taken literally, that 5 in the pedal would have to come with the fourth sixteenth of the right hand, producing a disturbing rhythmic and even harmonic clash. But this reading is in any case refuted by the original engraving, which shows that note lined up with the fifth sixteenth and third eighth. I might say that the vocal original of this piece is no help. Both the engraving and a later manuscript copy show the sixteens, if anything, before the last note of the ternary groups. Thus here again, dotted figures are to be assimilated to ternary groups.

The case of even duplets against triplets causes more agony because they are harder to play. Neither Quantz nor Agricola addressed the problem. C.P.E. Bach said nothing directly but gave an example showing how they are to be played: the second duplet note is played with the third triplet one, and the difficulty eliminated. There are a few other theoretical cautions against placing duplets against triplets and rules for assimilating the former to the latter if they are encountered. There are none to my knowledge that recommend playing two against three in true values, nor any that explain how to practice it.

The first movement of Sonata 3, BWV 327, offers a familiar and challenging instance of Bach's use of this clash. The piece moves along in quiet duplet time, establishing the offending motif from the first bar: \( \frac{4}{4} \) \( \frac{3}{4} \) \( \frac{4}{4} \) \( \frac{3}{4} \) \( \frac{4}{4} \) \( \frac{3}{4} \). But when it returns towards the first major cadence, it is already juxtaposed with triplets: \( \frac{4}{4} \) \( \frac{3}{4} \) \( \frac{4}{4} \) \( \frac{3}{4} \) \( \frac{4}{4} \) \( \frac{3}{4} \)

We hear it several times more, and then finally in bar 55. We have got used to hearing it in even values—unless we have decided to play the whole piece unequally. Suddenly, after only one bar, it is transferred to the top of the keyboard and accompanied by triplet arpeggios. Do we maintain its original character or do we make things easy for ourselves and introduce a rhythmic inconsistency in an important thematic germ? There are two questions. How important was consistency in these matters to Bach, and on the other hand, how much did he enjoy overcoming technical difficulties and how much did he encourage others to take the hard way?

I think the answer is not the obvious and attractive one. I should like to propose to you that he was perfectly willing to sacrifice consistency to expediency.

Look at BWV 546 again, the big prelude in C minor. After having established a flowing triplet rhythm, Bach wants to return to the opening material. But the pedal figure \( \frac{4}{4} \) \( \frac{3}{4} \) \( \frac{4}{4} \) \( \frac{3}{4} \) \( \frac{4}{4} \) \( \frac{3}{4} \) enters before the triplets are finished, and it is dotted for this one appearance.

Ex. 17

To be sure, we are dealing here with copies, not an autograph. I have not seen the sources. But the NBA critical notes say nothing about variants to this passage, and as I remarked above, composers seem not to have ordinarily made rhythmic adjustments of this kind.

The last movement of Sonata 4, BWV 528, is also inconsistent, and in the rhythm of the principal theme.

Ex. 18

In the right hand, the cadential bar is in even sixteens, and so it is in the left hand, even though it has triplets against it. But when it comes into the pedal, the equivalent to that bar, now transferred to the top part for convenience in pedal playing, it is dotted.

Ex. 19

From here on, the sources differ. The autograph goes back to even sixteens, and that is what the NBA prints. But another source in the hands of Friedemann and Anna Magdalena Bach has dotted added to the next pair of entries of the theme, both of which are against triplets. Griespenkerl, editor of the Peters edition in 1844, took Anna Magdalena's hand for that of the master himself, and chose this reading. But according to the NBA, the added dotting (so far as I can gather from the rather vague notes) is probably in J.S. Bach's hand. Why the editors did not incorporate it is not explained, unless the resultant inconsistency offended them. They appeared not to notice the inconsistency already introduced in the pedal theme. It is true, however, that neither source has dotting for the last pair of entries of the theme, even though there are triplets against one of them.

Note that this theme is different from that of Sonata 3, last movement, in one significant particular: triplets are introduced in the third bar of the theme, before the questionable duplets. Thus a player might decide ternary rhythm has precedence over binary, and that all even sixteens should be turned into trochaic rhythm, dots or no dots. Note also that except for the theme, all duplet divisi of the beat are dotted. This course can be used as an argument for leaving undotted notes "straight" in performance. But if we take C.P.E. Bach at his word the even sixteens will become trochaic and the dotted ones over dotted, with the 32nda after the third notes of the triplets. Personally, I don't like the deadening effect of even sixteens in this piece, but I think it is very possible and perhaps likely that Bach played the sixteens when they were alone and trochaic ones against the triplets.

The most famous two-against-three problem in all of Bach is "In dulci jubilo," BWV 608, from the Orgelbüchlein.

Ex. 20

The even quarters fairly leap out at one from the autograph manuscript. But later on in the piece, even quarters give way to trochaic figures, notated exactly this way, with triplet signs. No one seems to have noticed that these are introduced at exactly the point where Bach abandons the accompanying canon (the piece is a double canon to this point). Is that a sign? To play this piece as notated must have been a considerable challenge for musicians not brought up on Brahms. Not only did they have to manage nearly every combination of two and three between their different limbs, but they had to play the two conflicting rhythms in the same hand toward the end. But if Bach had wanted the quarters assimilated to the triplet rhythm, why did he not write them that way? After all, he was not too lazy to do it in bar 25. Perhaps the answer lies in an ingenious thematic relationship. Those repeated quarters at the beginning echo the six repeated halves of the first bar of the theme with its canonic imitation in the pedal, but in diminution. The effect of this manipulation, which could not be more typical of Bach, disappears if the quarters are made unequal.

But there is another solution. This introduces an approach to the problem first outlined by Michael Collins in his doctoral dissertation and two long articles in the Journal of the American Musicological Society in the mid 60's. I do not find Collins' arguments entirely convincing, but they certainly shake up any comfortable notions we might have of 17th-century rhythm, and they open possibilities that cannot be ignored. His ideas rest ultimately on the established fact that in the 16th century, ternary groups of blocked notes, when occurring simultaneously with normal white notation in binary mensuration, were not performed as triplets, which would be their proper value, but were converted into binary patterns.

Ex. 21

The American Organist 21.6, June 1987
Such "resolutions," he found, were applied to various note values well into the 17th century, and mentioned as late as 1735 by Mattheson.27 Collins proposed that the binary quarters of “In dulci jubilo” should take precedence over the triplets and cause their “resolution” into dactylic binary figures.

Ex. 22

This archaic interpretation was suggested partly because of the notation of the trochaic triplets ℚ₃, which he took for “colored” and which in turn might have suggested the notation of the trochaic triplets as ℚ₃ instead of ℚ₃, as they should be in 3/2 time. 28 It would not have been unlike Bach, in a didactic collection like the Ogelobüchlein, to have set some such puzzle to his pupils. In any case, Collins’s article stimulated John O’Donnell to print the piece, with all the triplets converted to various binary figures, in The Diapason for December 1975, with infinitely depressing results.

Nevertheless, it is true that in Bach’s music we can occasionally observe a hesitancy between trochaic ℚ₃, anapaestic ℚ₄, and dactylic ℚ₄ forms of the same melodic figure. Bar 14 of “Allein Gott in der Höh’ sei Ehre” has one figure that exists in all three forms in different copies.

Ex. 23

Such instances suggest that, if not literally identical in performance, these figures were to some extent interchangeable. There are a few nasty episodes in the finale of Sonate 2, BWV 526, that would be facilitated by interpreting the anapests as triplets (triplets). If this figure is taken at a lively, chamber music alla breve, the written rhythms become frenzied—but if smoothed into triplets, they flow easily. In Sonate 3, however, Bach has written an anapest against a trochaic, ℚ₃ as if he meant the difference to be reflected in performance.

The “Vater unser” from the Clavierübung presents a different possibility. In French notation, dots over notes that would ordinarily be unequal are a sign that they should be played equally. There is one place in the “French Overture” in Bach’s Goldberg Variations where he may have used dots over a scale of sixteenths with this meaning. In the “Vater unser,” almost all the triplets have dots over them. The meaning may be simply “detached,” but it may also be to prevent the player from “resolving” them under the influence of the Lombard rhythm and occasional duple figures against them—that is, the dots may be there to guarantee a “straight” execution.

CONCLUSIONS

The conclusions to be drawn from all these considerations are not comforting. Bach’s notation was sometimes consistent, sometimes inconsistent, and though we have noted instances where this inconsistency probably reflects his intentions, we could have cited many more which common sense can hardly chalk up to anything but carelessness or, more likely, haste.29 For there is every reason to think that Bach was not a careless composer, but he certainly had to compose in a hurry. But he told us nothing about how his rhythmic notation was to be realized in performance, and those who observed his playing and did say something disagree. The one thing that emerges from a study of the scores and theoretical texts is that the range of possibilities was broad, and they may include more than one authentic way to read a passage—ways perhaps adopted by Bach himself at different times. We should also bear in mind that there is much more to rhythmic liberty than inequality, overdotting and triplets. There is the whole matter of “aspores”—all these nuances of time and tempo that give life, expression and individuality to our playing.30 Until someone hitches up an organ to a computer and finds out what live players do now with their rhythm, we shall lack a framework in which to place the little historical information we might be able to apply to a study of this component of Baroque organ playing. An aspect that is never discussed but makes all the difference is rhythmic mannerisms—personal ones or fashions of the day. Can we ever reconstruct Bach’s mannerisms?31

If there is one exhortation with which I should like to end these discussions, it is that the technology that has only recently come into existence should be applied to the minute, quantitative analy-

sis of live organ playing (surely the instrument most susceptible to this kind of research). I can think of no better way of creating a fresh context in which to place the tried study of historical performance. So far as I know, the last person to try such an analysis was Marie Dominique Joseph Engramme, the barrel organ man, in 1775, and he didn’t have a computer.32

NOTES

1. Tutto il biogmeve per sonar il Pauta de 8 fori con pratica et orecchie. MSS. Italiani Cl. 4. No. 486. ed. 1638.


4. Quantz’s Versuch auf flache playing, 1752; C.P.E. Bach’s Versuch auf clavicord playing, 1753; Marpurg’s Anleitung zum Clavierspielen, 1755; Tartini’s treatise on violin playing, before 1766; Leopold Mozart’s Versuch, also on the violin, 1756; J.F. Agricola’s Anleitung zur Singkunst, after 1767, and further treatises by Anthony Bower, Bower’s Instructions, Corrette, Denis, Danzas, Gemiani, and again Marpurg.

5. George Stauffer and Ernest May’s J.S. Bach as Organist (Bloomington, 1986) presents 17 essays, none of which attempts to answer this question. Peter Le Huray and John Butt’s “In Search of Bach the Organist” in Bach, Handel, Scarlatti: Tertencenary Essays (Cambridge, England, 1989), pp. 185-99, offers some very tentative conclusions about articulation.


13. Staatsbibliothek der Stiftung preussischer Kulturbesitz, Mus. Ms. 40544, copied by J. Christopher Bach, c. 1700-10 (Mélancolie Lé).


21. The Art of Fugue is not precisely organ music, but the examples are instructive, and the four-voice fugues are a good deal more illogical to the organ than are some of the clavichord and harpsichord pieces that, with the encouragement of the Heinz Lohmann edition (Breitkopf & Härtel), Robert Marshall and others, we have been hearing recently.

24. Glasmanteno Banner (1745); Marburg (1759); Heck (c. 1770); all cited in Collins, pp. 314, 322-23.
25. It has been suggested that the flags on the eighth notes of these trochaic figures are additions by a later hand (cf. Loehmann, ed., Sinfonie Orgelwerke (Wienbaden, 1906), Vol. 7, p. 47). But why here and not in the last seven bars?
27. Cited by Collins (see note 20), pp. 281-82, note 2. But see the repudiation of this interpretation in Ex. 7, bottom line.
28. Explanations of the period tend to be less scientific, e.g., "some composers write it this way" (Sperling, 1708), or "it allows the grouping in threes" (French theorists).
29. The question of intention versus error is discussed at length with examples in the article by Dadiessen cited in note 6.
30. The word agokr was invented by Hugo Riemann, but the idea can be found in Baroque writings. Though never so precisely formulated as we would like. Roger North, writing around 1720, tried to explain what he called "the breaking and yet keeping time," basing his ideas on the teachings of Pier Francesco Tosi (1646-1732), whom he evidently knew in London. See Roger North on Music, ed. John Wilson (London, 1959), pp. 131-33.
31. Three examples of what is meant by "manierisms." all ways of ending a piece: speeding up and cutting off abruptly; exaggerated retard; fading out without concluding (as on recent recordings of popular music).

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